

Claims

1. Collision sensor comprising at least one sensing element to be arranged on a vehicle bumper element and an elastic profile, said elastic profile comprising at least one hollow chamber for accommodating said sensing element and at least one clip means for positively interlocking with a corresponding locating means of said vehicle bumper element.
2. Collision sensor according to claim 1, wherein said elastic profile comprises a base section which, in use, is directed towards said vehicle bumper element, and wherein said clip means is arranged on said base section of said elastic profile.
3. Collision sensor according to claim 2, wherein said elastic profile comprises a front section opposite of said base section, and wherein said base section comprises a higher rigidity than said front section.
4. Collision sensor according to claim 1, wherein said elastic profile is an extruded elastomer profile.
5. Collision sensor according to claim 1, wherein said elastic profile has a length which is substantially equal to a width of a vehicle bumper, such that after the assembly of said collision sensor on said bumper, said elastic profile extends substantially along the entire width of said vehicle bumper.
6. Collision sensor according to claim 1, wherein said elastic profile comprises an elongated form and wherein said clip means extends substantially along an entire length of said elastic profile.
7. Collision sensor according to claim 1, wherein said clip means comprises a rearward extending web having a cross section in the form of a barbed arrow.
8. Vehicle bumper with integrated collision sensor, said vehicle bumper comprising a bumper foam core and said collision sensor comprising a sensing element to be arranged on said bumper foam core, said collision sensor further comprising an elastic profile, said elastic profile comprising at

least one hollow chamber for accommodating said sensing element and at least one clip means for positively interlocking with a corresponding locating means of said bumper foam core.

- 5 9. Vehicle bumper according to claim 8, wherein said elastic profile comprises a base section resting against said bumper foam core, and wherein said clip means is arranged on said base section of said elastic profile.
10. Vehicle bumper according to claim 9, wherein said elastic profile comprises a front section opposite of said base section, and wherein said base section comprises a higher rigidity than said front section.
- 10 11. Vehicle bumper according to claim 8, wherein said elastic profile is an extruded elastomer profile.
12. Vehicle bumper according to claim 8, wherein said elastic profile has a length which is substantially equal to a width of said vehicle bumper and extends substantially along the entire width of said vehicle bumper.
- 15 13. Vehicle bumper according to claim 8, wherein said elastic profile comprises an elongated form and wherein said clip means extends substantially along an entire length of said elastic profile.
14. Vehicle bumper according to claim 8, wherein said clip means comprises a rearward extending web having a cross section in the form of a barbed ar-
20 row.
15. Vehicle bumper according to claim 8, wherein said locating means of said bumper foam core comprises a groove extending along at least a part of the bumper foam core.
- 25 16. Vehicle bumper according to claim 15, wherein said groove has a trapezoidal cross section, the base of said trapezoidal cross section being located inside said foam core.